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science for a changing world

Geographic Analysis and Monitoring Program

Global Land Cover Characterization Project

Statement of Problem

Land cover and land use characterization should be conducted at different scales and geographic extent. Coarse resolution satellite data covering large geographic areas such as a continent offer unique perspectives on dynamics of land cover and land use change. This project is designed to conduct research on large-area (from global to continental) coarse-resolution land cover characterization.

Objectives

By conducting research on coarse-resolution, large-area land cover patterns and conditions, we seek to answer these questions: can large-area land cover patterns be quantitatively mapped and characterized, how are some quantitative land cover conditions (such as % forest cover) change over time, how can these digital maps be linked to other science questions within the global climate change research?

Relevance and Impact
Characterization of land surface patterns, conditions, and changes should be conducted at all scales and geographic extents. Large-area (global to continental), coarse-resolution (therefore, temporally more frequent) land cover mapping and characterization provides one aspect of an overall accounting of land surface phenomenon.

Strategy and Approach

The project should be conducted in broad cooperation with national and international organizations engaged in the similar land cover research as well as global change studies. Our research directions should always have strong applicability's to important and identifiable global change science issues, such as carbon stock and flux, land productivity, and land cover/use change.

For More Information

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